

### **REMARKS**

Reconsideration and withdrawal of the examiner's rejections under 35 USC § 103 are respectfully requested in view of the claim amendments and following remarks.

Claims 1, 14 and 17 have been amended by incorporating the subject matter of claim 5, which has been canceled, without prejudice.

### The Present Invention

As set forth in independent claims 1, 14 and 17, the present inventions are directed to an edible *oil-in-water* emulsion, a method for making the edible emulsion and a food product comprising the edible emulsion. The edible emulsion comprises, among other things, insoluble fibers and specifically 0.5 to 12% by weight emulsifier comprising a viscosity-building emulsifier that at 2.0% by weight is partially or completely not soluble in acidified deionized water having a pH of less than or equal to 5.5, or a viscosity-building emulsifier that is at least about 50% by weight protein, or both. The viscosity-building emulsifier makes up from 0.1 to 4.0% by weight of the edible emulsion, with the proviso that when chemical emulsifier is used, *less chemical emulsifier is used than viscosity-building emulsifier*. The reduced oil food products made with the edible emulsion have consumer acceptable appearances, viscosities and texture, as well as sensorial properties consistent with full fat products.

Furthermore, the food products made with the edible emulsion comprising insoluble fiber, thickener and viscosity-building emulsifier of this invention have, in addition to excellent texture and sensorial properties, the added health benefit associated with food products containing fiber. Such food products also have the benefit of being substantially free of carbohydrates; therefore, very desirable to high protein/low carbohydrate dieters.

Insoluble fiber, according to the present invention, means fiber that is not water soluble whereby, when the same is supplied as an additive composition, the additive composition is not more than 50 % by weight soluble fiber, based on total weight of soluble and insoluble fiber in the additive composition.

The Present Invention is Not Obvious under 35 U.S.C. § 103(a)

Claims 1-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bily (US 4,432,999) alone or if necessary in view of Bakal (US 5,137,742). According to the Office Action, Bily discloses whey-soybean product and process; soybean paste is added to whey solids to create and edible use for the whey solids. Bily fails to disclose the inclusion of a thickener, the amount of emulsifier and fibers, as well as the pH; "viscosity building" emulsifier is not mentioned in the reference. But, according to the Office Action, one of ordinary skill in the art would have expected the viscosity to be further enhanced by the addition of any of the proteins in Hercules.; It is appreciated that the HLB of the emulsifiers and the oil droplet size of the composition are not mentioned, but no unobvious or unexpected results are seen from the recitation of these features, particularly when a stable emulsion is formed.; It is also appreciated that the settings for the homogenizer are not mentioned but to use one type of colloid mill over another would have been an obvious matter of choice with regard to the particular homogenizing apparatus that was available.

Applicants respectfully traverse.

Bily discloses a whey-soybean paste wherein comminuted soy paste constituents are reacted with whey solids. See Abstract. In contrast, the present invention is an oil-in-water emulsion. While Bily makes reference to "relatively large quantity" (Abstract) or "goodly" amounts (col. 5, lines 44-45) of whey, nothing in Bily even remotely suggests an edible oil-in-water emulsion as set forth in the present claims. While Bily at col. 9, lines 38-40 cited in the Office Action mentions lactalbumin found in whey and milk solids as having excellent foaming properties which contribute to the lighness and fluffiness of the final product, there is no disclosure or suggestion of viscosity building. To the contrary, foaming would suggest viscosity reduction. No

reference or suggestion is made whatsoever in Bily to an emulsifier system that has a specific amount of viscosity-building emulsifier in an oil-in-water emulsion. Bily is not relevant because Applicants do not claim whey solids as the invention. Rather, applicants claim a unique combination of emulsifiers, uniquely combined with other ingredients, to produce a composition having unique properties.

Bakal et al. do not cure the vast deficiencies of Bily as it relates to a starch-based mayonnaise-like product. Bakal lacks any suggestion of fibers which are critical to the consistency and mouthfeel of the products of the present invention.

The present invention differs from the cited art in the requirement that the protein in the oil-in-water emulsion composition be a viscosity building emulsifier. Notably, the presence of the viscosity building emulsifiers has shown (see example 2) that mayonnaise made via this invention has shine or sheen (which was key), firmness, mouth dissipation, and viscosity consistent with real mayonnaise, notwithstanding the fact that about 42% less oil was used. None of the references in any combination discloses the emulsifier mixture now depicted in the amended claims, all of which is important to achieve the above-described desired rheological and appearance characteristics. As to claims 22 and 23, these claims further define the food product by characterizing mouth dissipation and product sheen to that which is similar to full fat mayonnaise which typically has about 76% by weight oil.

### CONCLUSION

In light of the above amendments and remarks, applicants submit that all claims now pending in the present application are in condition for allowance. Reconsideration and allowance of the application is respectfully requested.

If a telephone conversation would be of assistance, Applicant's undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,

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